

## CLAIMS:

1. A method of treating a mood disorder in an individual suffering from the mood disorder, comprising administering an effective amount of an antagonist of high affinity nicotinic acetylcholine receptors and at least one agent for treatment of the mood disorder to the individual.
2. The method of claim 1 wherein the mood disorder is major depressive disorder, dysthymic disorder, depressive disorder NOS, or bipolar disorder.
3. The method of claim 2 wherein the mood disorder is major depressive disorder and the antagonist of high affinity nicotinic acetylcholine receptors is mecamylamine or a salt thereof.
4. The method of claim 3, wherein the agent for treatment of the mood disorder is a tricyclic antidepressant, a monoamine oxidase inhibitor, a selective serotonin reuptake inhibitor or a selective norepinephrine reuptake inhibitor, a norepinephrine dopamine reuptake inhibitor.
5. The method of claim 1 wherein the agent for treatment of a mood disorder is a selective serotonin reuptake inhibitor.
6. The method of claim 4 wherein the selective serotonin reuptake inhibitor is citalopram, clovoxamine, escitalopram, femoxetine, flesinoxan, fluoxetine, fluvoxamine, paroxetine, setraline, trazodone, or zimeldine.
7. The method of claim 5 wherein the selective serotonin reuptake inhibitor is citalopram, clovoxamine, escitalopram, femoxetine, flesinoxan, fluoxetine, fluvoxamine, paroxetine, setraline, trazodone, or zimeldine.

8. The method of claim 4 wherein the treatment comprises administering mecamylamine and a selective serotonin uptake inhibitor in a single formulation.

5 9. A pharmaceutical formulation comprising an antagonist of high affinity nicotinic acetylcholine receptors and at least one agent for treatment of a mood disorder.

10 10. The pharmaceutical formulation of claim 9 wherein the antagonist of high affinity nicotinic acetylcholine receptors is mecamylamine.

11. The pharmaceutical formulation of claim 10 wherein the formulation additionally comprises a carrier or excipient.

15 12. The pharmaceutical formulation of claim 10 wherein the mecamylamine is mecamylamine hydrochloride.

20 13. The pharmaceutical formulation of claim 9 wherein the antagonist of high affinity nicotinic acetylcholine receptors is mecamylamine and the additional agent is a selective serotonin reuptake inhibitor.

25 14. The pharmaceutical formulation of claim 9 wherein the additional active agent is a tricyclic antidepressant, a monoamine oxidase inhibitor, a selective serotonin reuptake inhibitor, a selective norepinephrine reuptake inhibitor, or a norepinephrine dopamine reuptake inhibitor.

15. The pharmaceutical formulation of Claim 14 wherein the additional agent is a selective serotonin reuptake inhibitor.

30 16. The pharmaceutical formulation of Claim 13 wherein the selective serotonin reuptake inhibitor is citalopram, clovoxamine, escitalopram, femoxetine, flesinoxan, fluoxetine, fluvoxamine, paroxetine, sertraline, trazodone, or zimeldine.

17. The pharmaceutical formulation of claim 10 wherein the additional active agent is a selective norepinephrine reuptake inhibitor.
- 5 18. The pharmaceutical formulation of claim 9 which is for oral administration.
19. The pharmaceutical formulation of claim 18 which is a liquid, a syrup, a tablet, a capsule, a powder, a sprinkle, a chewtab, or a dissolvable disc.
- 10 20. The pharmaceutical formulation of claim 10 which is for oral administration.
21. The pharmaceutical formulation of claim 20 which is a liquid, a
- 15 21. syrup, a tablet, a capsule, a powder, a sprinkle, a chewtab or a dissolvable disc.
22. The pharmaceutical formulation of claim 13 which is for oral administration.
- 20 23. The pharmaceutical formulation of claim 22 which is a liquid, a syrup, a tablet, a capsule, a powder, a sprinkle, a chewtab or a dissolvable disc.
24. A pharmaceutical formulation comprising an extended release form of mecamylamine and at least one additional active agent.